ISSUE 01/11

Wickes

GOOD IDEA LEAFLET 49

CHOOSING & FITTING CENTRAL HEATING RADIATORS

Wickes Universal Radiators are suitable for complete new installations, extensions of existing central heating systems, or as replacements for defective radiators.

They have, due to their 'convector' design, a higher heat output rate than other conventional panel radiators of the same size and of the same energy input.

Both single and double radiators are available, in a variety of sizes and input capacities to suit virtually all situations.

There is also a range of 'Designer Radiators' that can add an element of style to any room.

Pick up a copy of the Designer Radiators Brochure for details.

KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes catalogue, call our Freephone number which is: **0500 300 328**
- Visit our website at www.wickes.co.uk

Today radiators are not only there to keep your house warm they need to look good. The 'Wickes Universal Radiator' fulfils the role admirably. As well as being made to a high standard, it also has an excellent solvent free; powder coated brilliant white finish.

This radiator has an innovative design, allowing it to be hung in three different ways to match any style in your home. So whether you need a 'Round Top', 'Seam Top' or 'Compact'* style to match the radiators currently in your home, Wickes Universal Radiator will do the job. See page 2 for more details on hanging styles.

Wickes don't just sell high quality brilliant white panel radiators; we also sell designer styles, in colours and shapes to suit almost any taste and home. At Wickes, we offer a complete range; from towel radiators and slimline designs to larger, more unusual styles for the contemporary home, we've got the lot. All designer radiators in our comprehensive collection have either a traditional or contemporary style, allowing you to achieve the ultimate look for your home. We have towel radiators for virtually any bathroom and our towel radiators are designed not just to heat your towels but to warm your room as well.

Pick up a copy of the Designer Radiators Brochure for details, which is available at www.wickes.co.uk or In-Store.

*** Achievable with the addition of a Wickes conversion kit**

The main features of the Universal Radiators are:-

- Generates an average 18% more heat and uses less than half the water of a standard radiator
- Solvent-free high quality brilliant white finish
- Produced in the UK using British Steel
- Built to BS EN 442 standard
- 10 year Manufacturers Guarantee
- Individually factory pressure tested to 10.5 bar.
- Supplied complete with brackets, fixings and fittings.

BEFORE YOU START

CHOOSING RADIATOR STYLES

Wickes Universal radiator can be hung in three different ways to match any style in your home. If you are after a '**Seam Top**' or '**Round Top**' style then simply select the size of radiator you want and rotate it to your preferred style before hanging (one end is '**Round Top**', the other '**Seam Top**'). If you prefer a '**Compact**' style then purchase a separate Conversion Kit and apply to the radiator to create a '**Compact**' radiator. It's as easy as that.

OPTION 1
It can be hung as a **Seamtop**

OPTION 2
It can be hung as a **Roundtop**

ADD
Conversion kit

OPTION 3
Now it can be hung as a **Compact**

CHOOSING RADIATOR SIZES

The output of a radiator is measured in British Thermal Units per hour (B.T.U.s/hr). For any given room you need a radiator (or radiators) with sufficient capacity to heat that room to a satisfactory temperature level. **CHART A** gives the recommended temperatures for different rooms in the average house.

CHART B shows a basic formula for calculating radiator size.
This is only a guide, as there are many variables that could be taken into account when calculating requirements.

By using the two charts you can determine the radiator output necessary for any room. Refer then to **CHART C** to select a suitable radiator, either a single or a double, which will fit in the room conveniently. On some occasions, in large rooms for example, two radiators may be needed to reach the calculated output. They should ideally be positioned on opposite sides of the room.

CHART A

RECOMMENDED ROOM TEMPERATURES

Bedrooms	18°C	Bathroom	21°C
Living & Dining	21-22°C	Hallways & W.C's	18°C
Kitchen	20°C		

CHART B

CALCULATING YOUR HEAT REQUIREMENT

Once you have decided which style you would like for your home just follow these three simple steps. The following is a guide to help calculate an approximate heat output required for your room. If you require a specific heat output for a given room, we would recommend that you consult your local heating engineer to confirm the exact heat output requirements.

STEP 1
Calculate room volume (m^3) Length x Width x Hight

STEP 2
Calculate required radiator(s) output. For BTU/HR: Room volume (m^3) x 153
For Watts: Multiply BTU/HR by 0.293

STEP 3
Add or subtract correction factors.

For solid floor	-10%	For two outside wall	+15%	For uninsulated cavity walls	+10%	For three outside walls	+40%
For foam filled cavity walls	-20%	For northern aspects	+10%	For upstairs bedrooms	-25%	For no loft insulation	+15%
For double glazing	-5%	For high ceiling - 3m	+20%				

NOTE: These figures are for guidence only.

STEP 4
Select the radiator which best suits the size and estimated heat output for the room.

CHART C

RADIATOR SIZES & OUTPUTS

SINGLE RADIATOR				DOUBLE RADIATOR			
Height (mm)	Width (mm)	Wattage	BTU	Height (mm)	Width (mm)	Wattage	BTU
400	600	440	1501				
400	900	600	2252				
400	1200	880	3002				
500	400	356	1215	500	400	672	2294
500	500	445	1519	500	500	841	2870
500	600	534	1823	500	600	1009	3444
500	700	623	2126	500	700	1177	4017
500	800	712	2430	500	800	1345	4590
500	900	801	2734	500	900	1513	5164
500	1000	890	3038	500	1000	1681	5737
500	1100	976	3341	500	1200	1849	6311
500	1200	1068	3645	500	1300	2017	6884
500	1400	1246	4253	500	1400	2353	8031
500	1600	1424	4860	500	1600	2690	9181
600	400	414	1414	600	400	777	2653
600	500	518	1768	600	500	972	3316
600	600	622	2122	600	600	1166	3979
600	700	725	2475	600	700	1360	4642
600	800	829	2829	600	800	1554	5305
600	900	932	3182	600	900	1749	5968
600	1000	1036	3536	600	1000	1943	6631
600	1100	1140	3889	600	1100	2137	7293
600	1200	1243	4243	600	1200	2332	7958
600	1400	1450	4950	600	1400	2720	9284
600	1600	1658	5857	600	1600	3109	10610
700	400	469	1601	700	400	877	2993
700	500	586	2000	700	500	1096	3741
700	600	703	2399	700	600	1315	4488
700	700	802	2799	700	700	1534	5236
700	800	938	3201	700	800	1754	5986
700	900	1055	3601	700	900	1973	6734
700	1000	1172	4000	700	1000	2192	7481
700	1100	1289	4399	700	1100	2411	8229
700	1200	1406	4799	700	1200	2630	8976
700	1400	1641	5601	700	1400	3069	10474
700	1600	1875	6399	700	1600	3507	11969

PROJECT SHOPPING LIST

All radiators are supplied with the bleed valve factory fitted under a plastic cover on the back of each radiator panel. Depending on the radiator size, two or three hanging brackets with wall bolts are supplied.

For each radiator you will also need:

EITHER
A Lockshield Valve
Singles 421-551
Packs 5 421-623
A Thermostatic radiator valve
Singles 160-061

Packs containing lockshield valves and standard on / off wheelvalves
1 Pair 421-550
5 Pairs 421-302

INSTALLATION

FIG.1 Having decided on the location of the radiator, mark the wall to indicate where the brakets will hang. Remove the radiator. Using a spirit level and straightedge or a plumb bob and chalked line, make vertical marks on the wall in line with the bracket marks.

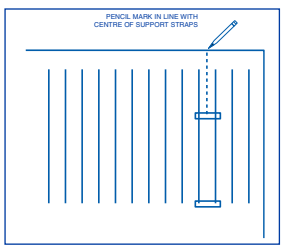
The next step is to determine how high above floor level you want the **bottom** of the radiator to be. As indicated you would normally have it level with or up to 50mm above the height of skirting boards, if the height below window sills allows for this. Thermostatic Radiator Valves (TRVs) are fitted to the flow or return tappings on the radiator with a lockshield valve on the other tapping. The TRV will be supplied with full fitting instructions.

THERMOSTATIC RADIATOR VALVES

Thermostatic radiator valves are used in place of standard on / off valves. Their purpose is to enable any central heating system to be used in a more effective and economic way, therefore saving you money. Instead of one central control thermostat switching all the radiators

in the home on or off at the same time, depending solely on the temperature near the thermostat, every radiator is independently controlled by its own thermostat. As soon as any individual room temperature reaches a pre-set level, the radiator in that room automatically reduces its output, yet others in the house continue to operate until they too reach the required temperature. As a result expensive heat is not wasted.

FIG.1



Always leave one radiator without a Thermostatic Radiator Valve if you have a fully pumped central heating and hot water system. The radiators, ideally the one near the room thermostat and the one in the bathroom, should have a permanently open lockshield valve at both ends.

This ensures that pressure is not put on the pump when the TRVs elsewhere have closed down the other radiators and allow the room thermostat to work correctly.

RADIATOR ISOLATING VALVES

By using isolating valves directly to both ends of the radiator, their removal will be very simple, and without the need to drain the system.

FIG.2
Hold one of the brackets against one of the vertical lines and locate on the horizontal mark. Mark on the wall the centre of the top slotted screw hole in the bracket. Repeat for the other bracket(s). At these marked points drill out 50mm deep holes in the wall to accept heavy duty wall plugs. Fix the bracket with 50mm No.12 screws. Fit the other bracket(s) in the same way.

To fit the radiator, lift and engage the rear straps over the bracket hooks. Check that all straps are fully engaged. Check that the radiator is level using a spirit level on the top edge. If any deviation is found remove the radiator and adjust one bracket on it's slots. Replace the level, screws should be plugged to the wall in the fixed screw holes at the bottom of the bracket.
NOTE: If the radiator is fitted to an outside wall it is recommended that Wickes Thermal Insulation Foil is attached to the wall behind the radiator, between the brackets, and before the radiators is finally hung.

It is worth noting that a double radiator of any size does not quite have the output of two single radiators of the same size. If space is available in a room, two single radiators would be more effective than one double.

FIG.2

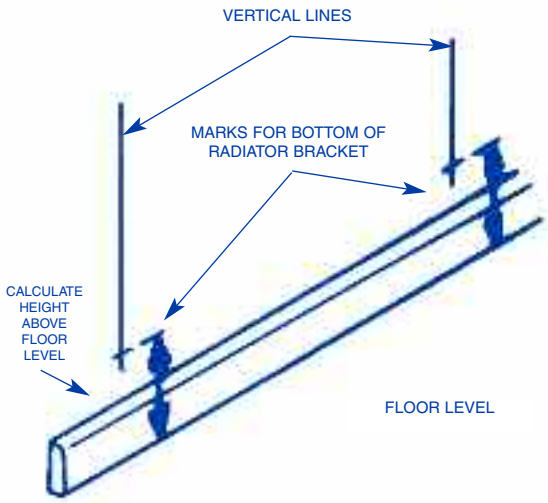
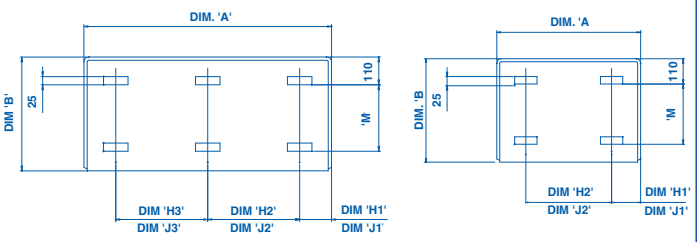


FIG.3 gives additional dimensional information.

FIG.3



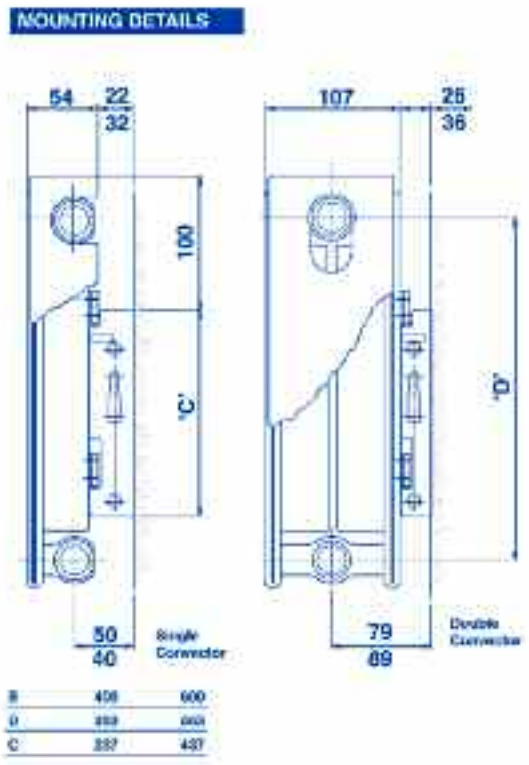
Note:
Dimensions H1, H2 and H3 refer to the lugs on the Panel.
Dimensions J1, J2 and J3 refer to the lugs on the Fin.

Bracket Lug heights

B	300	400	500	600	700
M	105	205	305	405	505

BRACKET LOCATIONS

	Radiator Length												
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
Bracket Lug Locations													
A	395	495	595	695	795	895	995	1095	1195	1295	1395	1495	1595
H1	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5
J1	135	160	160	160	160	160	160	160	160	160	160	160	160
H2	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350
J2	75	175	275	375	475	575	675	775	875	975	1075	1175	1275
H3	-	-	-	-	-	-	-	-	-	-	-	-	-
J3	-	-	-	-	-	-	-	-	-	-	-	-	-
Qty	4	4	4	4	4	4	4	4	4	4	4	4	4



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